

- 2 (a) a cylindrical frame made of ferromagnetic material;
- 3 (b) a sintered bearing fitted in and disposed within said frame
4 concentrically at a fitted section of the frame, an outer diameter of the sintered bearing
5 being larger than an inner diameter of the frame at the fitted section, the difference
6 between the inner diameter of the frame at the fitted section and an outer diameter of the
7 sintered bearing being between 0 μm and 20 μm ;
- 8 (c) a cylindrical magnet fixed on an outer wall of said sintered bearing at
9 an inner wall of said magnet; and
- 10 (d) a cylindrical coil facing said magnet via an annular space,
11 wherein said frame and said sintered bearing are welded at the fitted section.
- 1 9. (Amended) An apparatus comprising:
- 2 (a) a housing; and
- 3 (b) a motor disposed in said housing, said motor including:
- 4 (b-1) a cylindrical frame made of ferromagnetic material;
- 5 (b-2) a pipe fitted in and disposed within said frame concentrically at a
6 fitted section of the frame, an outer diameter of the pipe being larger than an inner
7 diameter of the frame at the fitted section, the difference between the inner diameter
8 of the frame at the fitted section and the outer diameter of the pipe is between 0 μm
9 and 20 μm ;
- 10 (b-3) a sintered bearing press-fitted into said pipe;
- 11 (b-4) a cylindrical magnet fixed on an outer wall of said pipe at an
12 inner wall of said magnet; and
- 13 (b-5) a cylindrical coil facing said magnet via an annular space,
14 wherein said frame and said pipe are welded at the fitted section.
- 1 13. (Amended) An apparatus comprising:
- 2 (a) a housing;
- 3 (b) a motor disposed in said housing, said motor including:

4 (b-1) a cylindrical frame made of ferromagnetic material;

5 (b-2) a sintered bearing fitted in and disposed within said frame
6 concentrically at a fitted section of the frame, an outer diameter of the sintered
7 bearing being larger than an inner diameter of the frame at the fitted section, the
8 difference between the inner diameter of the frame at the fitted section and an outer
9 diameter of the sintered bearing being between 0 μm and 20 μm ;

10 (b-3) a cylindrical magnet fixed on an outer wall of said sintered
11 bearing at an inner wall of said magnet; and

12 (b-4) a cylindrical coil facing said magnet via an annular space,
13 wherein said frame and said sintered bearing are welded at the fitted section.